

B.23 VENUS EXPRESS MISSION U.S. PARTICIPATING SCIENTISTS PROGRAM

1. Scope of the Program

Venus Express (VeX) is a European Space Agency (ESA) mission to Venus that consists of a polar orbiter, with the periapsis of the orbit at the north pole and apoapsis at the south pole. The instruments aboard the Venus Express Spacecraft are: the Venus Monitoring Camera (VMC); the Planetary Fourier Spectrometer (PFS); the Spectroscopy for the Investigation of Characteristics of the Atmosphere of Venus instrument (SPICAV); the Visible and Infrared Thermal Imaging Spectrometer (VIRTIS); the Venus Radio Experiment (VeRa) ; the Magnetometer (MAG); and the Analyzer of Space Plasmas and Energetic Atoms (ASPERA-4). The science objectives of the mission include exploring the global circulation of the Venusian atmosphere, Venusian meteorology, chemistry of the atmosphere and the surface, Venusian volcanism, and atmospheric loss. The mission launch is planned for October 2005. Venus Orbit Insertion is expected in April 2006, and the prime mission extends from April 2006 to October 2007.

The National Aeronautics and Space Administration (NASA) expects to support the participation of a small number of U. S. scientists in the Venus Express mission. Proposers to this opportunity must propose a scientific investigation using one or more of the Venus Express instruments, and each proposer must include in the proposal a letter of endorsement from the European leader for each Venus Express instrument whose data are required for the investigation. Proposers may propose support for up to one year after the completion of the prime mission. NASA expects to support approximately 7 U. S. scientists as Venus Express participating scientists.

Successful proposals to this opportunity will include a full description of how the investigator will assist in providing Venus Express data to the Planetary Data System, appropriately documented and in a PDS compliant format.

Note that for NASA to properly evaluate the relevance to NASA goals of proposals submitted to its programs, as well as to track its progress towards achieving its goals as mandated by the Government Performance Review Act (GPRA), all research supported by NASA must demonstrate its relevance to NASA's Goals and Research Focus Areas (RFA's) as stated in the latest version of its Strategic Plan (follow links from the Web site <http://spacescience.nasa.gov/>); see also the discussion in Section I(a) of the *Summary of Solicitation* of this solicitation. All proposers to this program must describe the relevance of their specific investigation to the Goals, Science Objectives, and RFA's given in Table 1 in the *Summary of Solicitation*. The appropriate place for this statement of relevancy is in the introduction to the proposal's "Scientific/Technical/Management" section (see Section 2.3.5 in the *Guidebook for Proposers*). The index numbers in this table may be used to identify a specific RFA, for example, "Goal I, Sun-Earth Connection Theme, RFA 1(c)" or "Goal II, Astronomical Search for Origins, RFA 3(b)."

Selection by NASA through this Amendment does not constitute selection of the investigation as part of the parent mission, which necessarily is a decision made by the sponsor of that mission. Instead, selection through this Amendment only indicates the commitment by NASA to fund the NASA portion of the proposed investigation.. If an investigation is selected both by NASA and by the mission sponsor, the U.S. VEX investigator is responsible to NASA for the scientific integrity and the management of his/her contribution to the mission.

2. Sources of Information and Data

For more information on the Venus Express mission, please contact
Stephen.Saunders@nasa.gov

3. Supplemental Information

The page limit for Venus Express U.S. Participating Scientists program proposals is 5 pages.

4. Programmatic Information

The period of performance of this effort is for 3 years.

It is anticipated that approximately \$600K per year will be available to support the effort in FY06-FY08.

IMPORTANT INFORMATION

The *Summary of Solicitation* of this NRA points out that NASA Headquarters now uses a single, unified set of instructions, entitled *NASA Guidebook for Proposers Responding to NASA Research Announcements – 2004*, that provides detailed guidance for the preparation and submission of proposals to most of its NRA's. By reference the current edition, *Guidebook for Proposers*, is incorporated into this solicitation and is accessible by linking through the menu item "Helpful References" at the Web site <http://research.hq.nasa.gov> or it may be directly accessed at <http://www.hq.nasa.gov/office/procurement/nraguidebook/>. Proposers to this Program Element are urged to familiarize themselves with this document, in particular its Chapters 1, 2, and 3, before preparing a proposal. This NRA's *Summary of Solicitation* also contains the schedule and instructions for the electronic submission of both the *Notice of Intent* (NOI) to propose, as well as a proposal's *Cover Page/Proposal Summary/Budget Summary* for the proposal, and the mailing address for the submission of proposals. The schedule for the submission of Notices of Intent (NOIs) to propose, which are not required but strongly encouraged, and of the hard copies of the proposals is:

- NOI Due Date January 28, 2005
- Proposal Due Date (4:30 p.m. EST) March 30, 2005

For further information contact the NASA VENUS EXPRESS Program Scientist:

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